

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022731**Date Inspected:** 20-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Liu Hua Jie**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder( OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

**OBG # TRIAL ASSEMBLY YARD****WELDING:****Segment 13CW**

This QA Inspector observed ZPMC qualified welding personnel identified as 045196 perform Shielded Metal Arc Welding (SMAW), weld joint identified as DP3146-001-246; located On Orthotropic Box Girder (OBG) Deck Panel Diaphragm to Longitudinal Diaphragm CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Shi Lei.

The Critical Welding Repair Report (CWRR) was B-CWR2930. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Shi Lei was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-3G (3F) FCM-Repair-1. See attached photo for further details.

**Segment 12CW**

# WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

This QA Inspector observed ZPMC qualified welding personnel identified as 067942 perform Shielded Metal Arc Welding (SMAW), weld joint identified as CA3011-005; located On Orthotropic Box Girder (OBG) Bottom Plate to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Hu Mei Gang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Hu Mei Gang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-B-U2-FCM-1. See attached photo for further details.

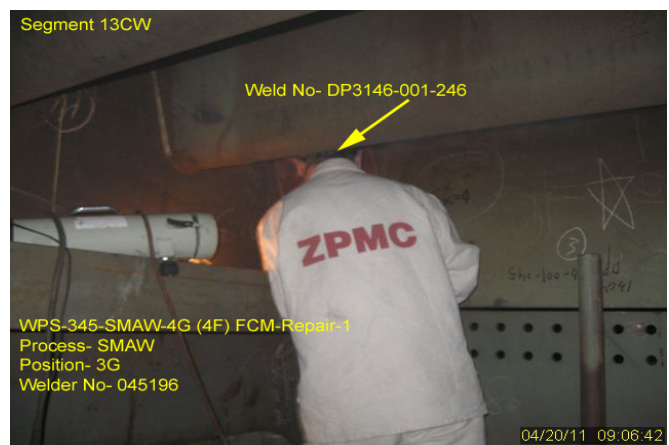
## Segment 13CW

This QA Inspector observed ZPMC qualified welding personnel identified as 045196 perform Shielded Metal Arc Welding (SMAW), weld joint identified as DP3146-001-253; located On Orthotropic Box Girder (OBG) Deck Panel Diaphragm to Longitudinal Diaphragm CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The Critical Welding Repair Report (CWRR) was B-CWR2931. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Shi Lei was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-3G (3F) FCM-Repair-1. See attached photo for further details.

## Segment 13BW ~ 13CW

This QA Inspector observed ZPMC qualified welding personnel identified as 045213 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW13A-016; located On Orthotropic Box Girder (OBG) Deck Plate to Deck Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The Welding Repair Report (WRR) was B-WR20634. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Shi Lei was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-3G (3F) FCM-Repair-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.



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## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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### Summary of Conversations:

No significant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Prabhune,Manoj	Quality Assurance Inspector
<b>Reviewed By:</b>	Peterson,Art	QA Reviewer

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